

HARBOR VIEW ESTATES HOMEOWNERSASSOCIATION INC. (PWSNO 1280222)
SOURCE WATER ASSESSMENT REPORT

October 11, 2001



State of Idaho
Department of Environmental Quality

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Executive Summary

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the Act. This assessment is based on a land use inventory of the designated assessment area and sensitivity factors associated with the watershed characteristics.

This report, *Source Water Assessment for Harbor View Estates Homeowners Association, Inc.*, describes the public drinking water system, the zone boundary of water contribution, and the associated potential contaminant sources located within the boundary. This assessment, taken into account with local knowledge and concerns, should be used as a planning tool to develop and implement appropriate protection measures for this source. **The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The Harbor View Estates Homeowners Association, Inc. drinking water source consists of an intake in Coeur d'Alene Lake at a depth of 120 feet about 300 feet from the shore at Three-Mile Point. Coeur d'Alene Lake is an unprotected source subject to fluctuations in turbidity from seasonal runoff. Located in the main flow through channel of the lake, the intake is susceptible to contamination by heavy metals from the Coeur d'Alene River Basin during floods.

Nitrate in concentrations from 0.022 mg/l to 0.109 mg/l was detected in the water in 1991, 1993, 1995, 1996, 1999 and 2000. The Maximum Contaminant Level (MCL) for Nitrate is 10 mg/l. The volatile organic chemical dichlorodifluoromethane, a refrigerant, was detected at a concentration of 1.25 micrograms per liter. in a sample taken in September 1993 but has not been detected since. The MDL is 0.500. Radionuclides in concentrations below the MCL have been present in the water since testing began in 1991. A sample taken in September 1991 showed the presence of fluoride, MCL 4.0 mg/l, at a concentration of 0.12 mg/l; iron, MCL 0.300 mg/l, at a concentration of 0.16 mg/l and zinc, MCL 5 mg/l at a concentration of 0.015 mg/l. These inorganic chemical contaminants have not been detected since.

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

For Harbor View Estates Homeowners Association, Inc., source water protection efforts should focus on cooperative activities with other public water systems, private and public agencies involved in water quality programs involving the entire Coeur d'Alene-St Joe Basin. Partnerships with federal, state and local agencies and industry groups should be established and are critical to success. Due to the fairly short time associated with the movement of surface waters, source water protection activities should be aimed at short-term management strategies with the development of long-term management strategies to counter any future contamination threats.

A community with a fully developed source water protection program will incorporate many strategies. For assistance in developing protection strategies please contact your regional IDEQ office or the Idaho Rural Water Association.

SOURCE WATER ASSESSMENT FOR HARBOR VIEW ESTATES HOMEOWNERS ASSOCIATION, INC

Section 1. Introduction - Basis for Assessment

The following sections contain information necessary to understand how and why this assessment was conducted.

It is important to review this information to understand what the ranking of this source means. A map showing the delineated source water assessment area, a map showing the entire watershed contributing to the delineated area, a map showing the twenty-four (24) hour emergency response delineation, and the inventory of significant potential sources of contamination identified within the delineated area are included. Significant potential contaminant sources found in the delineation are listed and the worksheet used to develop the assessment also is attached.

Background

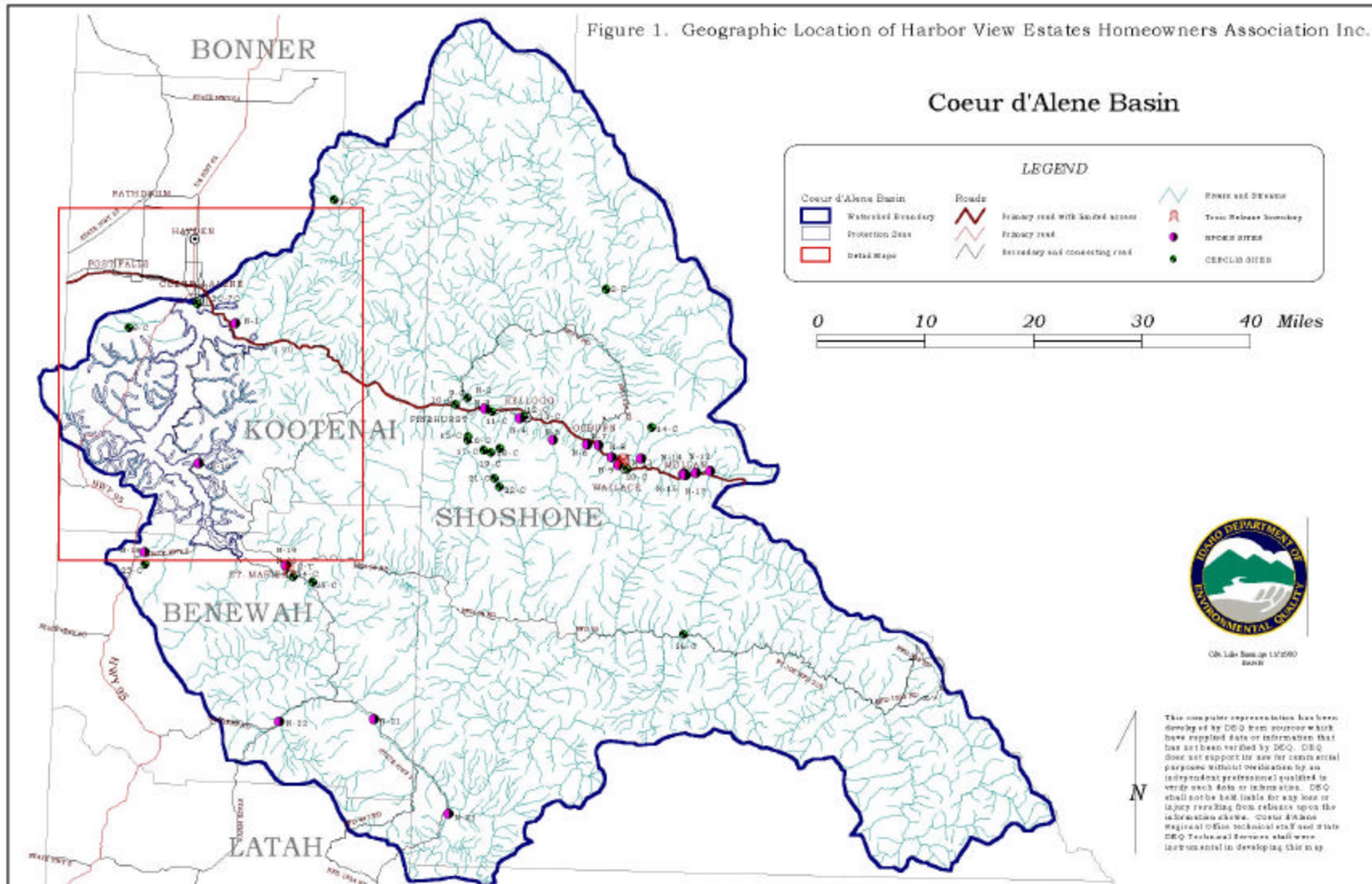
Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative susceptibility to contaminants regulated by the Safe Drinking Water Act. This assessment is based on a land use inventory of the delineated assessment area and sensitivity factors associated with the intakes and watershed characteristics.

Level of Accuracy and Purpose of the Assessment

Since there are over 2,900 public water sources in Idaho, time and resources to accomplish the assessments are limited. All assessments must be completed by May of 2003. An in-depth, site-specific investigation of each significant potential source of contamination is not possible. **Therefore, this assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The ultimate goal of the assessment is to provide data to local communities to develop a protection strategy for their drinking water supply.. The Idaho Department of Environmental Quality (IDEQ) recognizes that pollution prevention activities generally require less time and money to implement than treatment of a public water supply system once it has been contaminated. IDEQ encourages communities to balance resource protection with economic growth and development. The decision as to the amount and types of information necessary to develop a source water protection program should be determined by the local community based on its own needs and limitations. Source water protection is one facet of a comprehensive growth plan, and it can complement ongoing local planning efforts.

Figure 1. Geographic Location of Harbor View Estates Homeowners Association Inc.



Section 2. Conducting the Assessment

General Description of the Source Water Quality

Harbor View Estates Homeowners Association, Inc. water system serves a community of approximately 60 people, located on the western shore of Coeur d'Alene Lake. (Figure 1). The public drinking water system for Harbor View Estates Homeowners Association, Inc. The Harbor View Estates Homeowners Association, Inc. drinking water source consists of an intake in Coeur d'Alene Lake at a depth of 120 feet about 300 feet from the shore at Three-Mile Point.

The primary water quality issue currently facing Harbor View Estates Homeowners Association, Inc. is that of contaminants from agriculture, mining and other industries and communities in the Coeur d'Alene-St Joe Basin entering the lake during periods of high runoff. Another concern is nutrient loading from septic systems serving the houses that line the shore.

Defining the Zones of Contribution--Delineation

To protect surface water systems from potential contaminants, the EPA required that the entire drainage basin be delineated upstream from the intake to the hydrologic boundary of the drainage basin (U.S. EPA, 1997b). The EPA recognized that an intake on a large water body could have an extensive drainage basin. Therefore, the EPA recommended that large drainage basins be segmented into smaller areas for the purpose of implementing a cost-effective potential contaminant inventory and susceptibility analysis. The delineation process established the physical area around an intake that became the focal point of the assessment. For Harbor View Estates Homeowners Association, Inc. a lake buffer zone extending 500 feet from the shoreline around the circumference of the lake was mapped. In addition to the buffer zone around the lake itself, creeks and rivers discharging into the lake were delineated. This stream buffer zone extends from the lake up the rivers or streams and their tributaries to a distance of 25-miles from the intake, or to the 4-hour streamflow time-of-travel boundary, whichever is greater (Figure 2). The entire water surface area of the lake along with the 500' buffer around the lake is also the 24-hour emergency response delineation for Harbor View Homeowners Association, Inc.

A map of the entire watershed, showing locations of highways and any Superfund sites (CERCLIS), Toxic Release Inventory sites or National Pollutant Discharge Elimination System (NPDES) facilities which could pose a threat to the lake, is also included (Figure 2). The presence of these sites in the watershed was factored into the susceptibility analysis for the Harbor View Estates Homeowners Association, Inc. lake intake. The data used by IDEQ in determining the source water assessment delineation are available upon request.

Identifying Potential Sources of Contamination

A potential source of contamination is defined as any facility or activity that stores, uses, or produces, as a product or by-product, the contaminants regulated under the Safe Drinking Water Act and has a sufficient likelihood of releasing such contaminants at levels that could pose a concern relative to drinking water sources. The goal of the inventory process is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of surface water contamination. The locations of potential sources of contamination within the delineation areas were obtained by field surveys conducted by IDEQ and from available databases.

The watershed for Coeur d'Alene Lake covers parts of Shoshone, Benewah, Kootenai, Bonner, Latah and Clearwater Counties in north Idaho. It encompasses a number of small towns where mining and logging are the primary economic activities. The vast majority of the land in the basin is publicly owned. Most of the agricultural land in the basin is located south and west of the lake. Land in the buffer zone around the lake is mostly privately owned and has been heavily developed for year-round and summer homes. The lake itself gets intensive recreational use.

It is important to understand that a release may never occur from a potential source of contamination provided they are using best management practices. Many potential sources of contamination are regulated at the federal level, state level, or both to reduce the risk of release. Therefore, when a business, facility, or property is identified as a potential contaminant source, this should not be interpreted to mean that this business, facility, or property is in violation of any local, state, or federal environmental law or regulation. What it does mean is that the potential for contamination exists due to the nature of the business, industry, or operation. There are a number of methods that water systems can use to work cooperatively with potential sources of contamination. These involve educational visits and inspections of stored materials. Many owners of such facilities may not even be aware that they are located near a public water supply intake.

Contaminant Source Inventory Process

A contaminant inventory of the study area was conducted by IDEQ. It involved identifying and documenting potential contaminant sources within the Harbor View Estates Homeowners Association, Inc. Source Water Assessment Area through the use of computer databases and Geographic Information System (GIS) maps developed by IDEQ.

A total 99 potential contaminant sites are located within the lake and stream buffer zones. 50 major sites are located in the watershed but outside of the buffer zone (see Table 1). There will be duplicates in some instances because a site was documented on more than one database. Most of the potential contaminant sources within delineated source water areas are clustered near Coeur d'Alene. Because of the direction of water flow in the lake it is unlikely that a contaminant release at Coeur d'Alene would affect water quality at Harbor View Estates. Potential contaminant sources located in the buffer zones around the lake and tributary streams include septic tanks, petroleum storage tanks, waste water land application sites, a landfill, roads and a number of small business where contaminants of concern may be used (Figure 2). Table 1 lists the potential contaminants of concern and the information source.

Figure 2. Harbor View Estates Homeowners Association, Inc. Delineation Map and Contaminant Sources

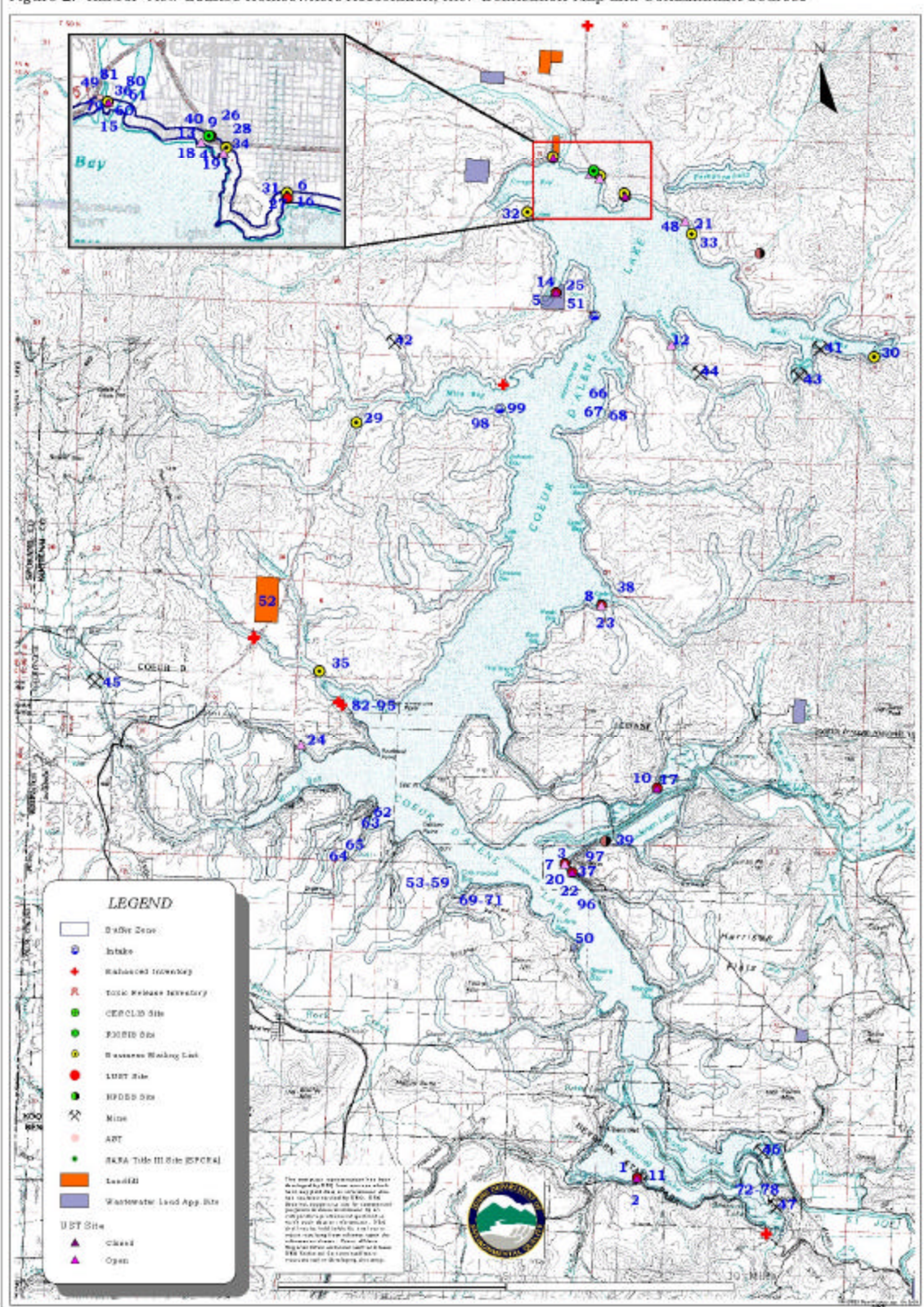


Table 1. Harbor View Estates Homeowners Association, Inc. Potential Contaminant Inventory

| Buffer Zone Map ID | Description | Potential Contaminant | Source of Information |
|--------------------|------------------------|-----------------------|-----------------------|
| 1 | PETROLEUM STORAGE TANK | VOC, SOC | LUST Database |
| 2 | PETROLEUM STORAGE TANK | VOC, SOC | LUST Database |
| 3 | PETROLEUM STORAGE TANK | VOC, SOC | LUST Database |
| 4 | PETROLEUM STORAGE TANK | VOC, SOC | LUST Database |
| 5 | PETROLEUM STORAGE TANK | VOC, SOC | LUST Database |
| 6 | PETROLEUM STORAGE TANK | VOC, SOC | LUST Database |
| 7 | PETROLEUM STORAGE TANK | VOC, SOC | LUST Database |
| 8 | PETROLEUM STORAGE TANK | VOC, SOC | LUST Database |
| 9 | PETROLEUM STORAGE TANK | VOC, SOC | LUST Database |
| 10 | PETROLEUM STORAGE TANK | VOC, SOC | LUST Database |
| 11 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 12 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 13 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 14 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 15 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 16 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 17 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 18 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 19 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 20 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 21 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 22 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 23 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 24 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 25 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 26 | PETROLEUM STORAGE TANK | VOC, SOC | UST Database |
| 27 | MARINA | VOC, SOC | Business Mailing List |
| 28 | CAR RENTAL | VOC, SOC | Business Mailing List |
| 29 | EXCAVATING CONTRACTORS | VOC, SOC | Business Mailing List |
| 30 | CAMP GROUND | Microbial | Business Mailing List |
| 31 | GENERAL CONTRACTORS | VOC, SOC | Business Mailing List |
| 32 | MARINE CONTRACTORS | VOC, SOC | Business Mailing List |
| 33 | MINING COMPANY | IOC | Business Mailing List |
| 34 | PHOTOGRAPHER | IOC | Business Mailing List |
| 35 | RV PARK,MARINA | VOC, SOC | Business Mailing List |
| 36 | BOAT DEALERS | VOC, SOC | Business Mailing List |
| 37 | MACHINE SHOP | VOC, SOC | Business Mailing List |
| 38 | FIRE STATION | VOC, SOC | Business Mailing List |
| 39 | WASTE WATER TREATMENT | Microbial | NPDES Database |
| 40 | CITY SHOP | VOC, SOC | RCRIS Database |
| 41 | PROSPECT | Lead ,IOC | Mine Database |
| 42 | GRAVEL PIT | Sediment | Mine Database |
| 43 | MINE DATABASE | Lead ,IOC | Mine Database |
| 44 | GRAVEL PIT | Sediment | Mine Database |
| 45 | CLAY DEPOSIT | Sediment | Mine Database |
| 46 | PEAT OCCURRENCE | Coal ,IOC, VOC | Mine Database |
| 47 | CLAY OCCURRENCE | Sediment | Mine Database |
| 48 | MARINA | VOC, SOC | SARA Database |
| 49 | BOAT SALES | VOC, SOC | AST Database |

Table 1. Harbor View Estates Homeowners Association, Inc. Potential Contaminant Inventory, Cont.

| Buffer Zone Map ID | Description | Potential Contaminant | Source of Information |
|--------------------|------------------------------|-----------------------|-----------------------|
| 50 | WASTE WATER LAND APPLICATION | Microbial | WLAP Database |
| 51 | WASTE WATER LAND | Microbial | WLAP Database |
| 52 | LANDFILL | Microbial, SOC, VOC, | Landfill Database |
| 53 | TRANSPORTATION CORRIDOR | IOC, VOC, SOC, | Enhanced Inventory |
| 54 | DRAINFIELD | microbial | Enhanced Inventory |
| 55 | DRAINFIELD | microbial | Enhanced Inventory |
| 56 | DRAINFIELD | microbial | Enhanced Inventory |
| 57 | DRAINFIELD | microbial | Enhanced Inventory |
| 58 | DRAINFIELD | microbial | Enhanced Inventory |
| 59 | SMALL HISTORICAL LANDFILL | Microbial, SOC, VOC, | Enhanced Inventory |
| 60 | FILTERED DRAINFIELD AND | microbial | Enhanced Inventory |
| 61 | SURFACE WATER | microbial | Enhanced Inventory |
| 62 | BOAT DOCKS | SOC, VOC | Enhanced Inventory |
| 63 | ROADS | IOC, VOC, SOC, | Enhanced Inventory |
| 64 | DRYLAND AGRICULTURE | IOC,SOC, Sediment | Enhanced Inventory |
| 65 | ROADS | IOC, VOC, SOC, | Enhanced Inventory |
| 66 | SEPTIC TANK | microbial | Enhanced Inventory |
| 67 | SEPTIC TANK | microbial | Enhanced Inventory |
| 68 | SEPTIC DRAINFIELD | microbial | Enhanced Inventory |
| 69 | STORAGE GARAGE AND | SOC, VOC | Enhanced Inventory |
| 70 | ABOVE GROUND FUEL | SOC, VOC | Enhanced Inventory |
| 71 | FIELD DRAINAGE | Sediment | Enhanced Inventory |
| 72 | SEPTIC TANK | microbial | Enhanced Inventory |
| 73 | SEPTIC TANK | microbial | Enhanced Inventory |
| 74 | SEPTIC TANK | microbial | Enhanced Inventory |
| 75 | SEPTIC TANK | microbial | Enhanced Inventory |
| 76 | SEPTIC TANK | microbial | Enhanced Inventory |
| 77 | SEPTIC TANK | microbial | Enhanced Inventory |
| 78 | HISTORICAL SEPTIC TANKS | microbial | Enhanced Inventory |
| 79 | BOAT SERVICE REPAIR | SOC, VOC | Enhanced Inventory |
| 80 | HISTORICAL LANDFILL | Microbial, SOC, VOC, | Enhanced Inventory |
| 81 | ABOVE GROUND FUEL | SOC, VOC | Enhanced Inventory |
| 82 | SEPTIC TANK | microbial | Enhanced Inventory |
| 83 | SEPTIC TANK | microbial | Enhanced Inventory |
| 84 | SEPTIC TANK | microbial | Enhanced Inventory |
| 85 | DRAINFIELD | microbial | Enhanced Inventory |
| 86 | PRIVATE SEWER SYSTEM | microbial | Enhanced Inventory |
| 87 | SEPTIC TANK AND DRAINFIELD | microbial | Enhanced Inventory |
| 88 | SEPTIC TANK AND DRAINFIELD | microbial | Enhanced Inventory |
| 89 | SEPTIC TANK | microbial | Enhanced Inventory |
| 90 | SEPTIC TANK | microbial | Enhanced Inventory |
| 91 | SEPTIC TANK AND DRAINFIELD | microbial | Enhanced Inventory |
| 92 | SEPTIC TANK | microbial | Enhanced Inventory |
| 93 | SEPTIC TANK | microbial | Enhanced Inventory |
| 94 | 1200 GALLON HOLDING TANK | microbial | Enhanced Inventory |
| 95 | HOLDING TANK | microbial | Enhanced Inventory |
| 96 | CITY SHOP | SOC, VOC | Enhanced Inventory |

Table 1. Harbor View Estates Homeowners Association, Inc. Potential Contaminant Inventory, Cont.

| Buffer Zone Map ID | Description | Potential Contaminant | Source of Information |
|---------------------------|--------------------------|------------------------------|------------------------------|
| 97 | FACTORY | SOC, VOC | Enhanced Inventory |
| 98 | SEPTIC HOLDING TANK | MICROBIAL | Enhanced Inventory |
| 99 | FUEL STORAGE TANK | SOC, VOC | Enhanced Inventory |
| Basin Map ID | Description | Potential Contaminant | Source of Information |
| N-1 | H2O TREATMENT | Suspended Solids | NPDES Database |
| N-2 | H2O TREATMENT | Microbial | NPDES Database |
| N-3 | H2O TREATMENT | Microbial | NPDES Database |
| N-4 | MINE | IOC | NPDES Database |
| N-5 | WATER FILTER | Suspended Solids | NPDES Database |
| N-6 | WATER FILTER | Suspended Solids | NPDES Database |
| N-7 | MINE | IOC | NPDES Database |
| N-8 | MINE | IOC | NPDES Database |
| N-9 | MINE | IOC | NPDES Database |
| N-10 | H2O TREATMENT | Microbial | NPDES Database |
| N-11 | MINE | IOC | NPDES Database |
| N-12 | MINE | IOC | NPDES Database |
| N-13 | MINE | IOC | NPDES Database |
| N-14 | MINE | IOC | NPDES Database |
| N-15 | MINE | IOC | NPDES Database |
| N-16 | H2O TREATMENT | Microbial | NPDES Database |
| N-17 | MINE | IOC | NPDES Database |
| N-18 | MUNICIPAL | Microbial | NPDES Database |
| N-19 | INDUSTRIAL | VOC | NPDES Database |
| N-20 | MUNICIPAL | Microbial | NPDES Database |
| N-21 | MUNICIPAL | Microbial | NPDES Database |
| N-22 | MUNICIPAL | Microbial | NPDES Database |
| N-23 | MUNICIPAL | Microbial | NPDES Database |
| 1-C | CAMP DUMP | Microbial, SOC, VOC | CERCLA Database |
| 2-C | BRIDGE | | CERCLA Database |
| 4-C | CONCRETE & ASPHALT PLANT | VOC | CERCLA Database |
| 3-C | PAINT STORE | SOC,VOC | CERCLA Database |
| 5-C | GROCERY | | CERCLA Database |
| 6-C | DRY CLEANER | VOC | CERCLA Database |
| 7-C | AUTO REPAIR | VOC | CERCLA Database |
| 8-C | ROAD | SOC, SEDIMENT | CERCLA Database |
| 9-C | MOVING COMPANY | VOC | CERCLA Database |
| 10-C | WORK CENTER | Microbial, SOC, VOC, | CERCLA Database |
| 11-C | WOOD TREATMENT | SOC,VOC | CERCLA Database |
| 13-C | MINE | IOC | CERCLA Database |
| 12-C | PHOSPHATE COMPANY | IOC | CERCLA Database |
| 14-C | MINE | IOC | CERCLA Database |
| 15-C | MINE | IOC | CERCLA Database |
| 16-C | TAILINGS | IOC | CERCLA Database |
| 17-C | MILLSITE | IOC | CERCLA Database |
| 18-C | MILLSITE | IOC | CERCLA Database |
| 19-C | TAILINGS | IOC | CERCLA Database |
| 20-C | MILLSITE | IOC | CERCLA Database |

Table 1. Harbor View Estates Homeowners Association, Inc. Potential Contaminant Inventory, Cont.

| Basin Map ID | Description | Potential Contaminant | Source of Information |
|--------------|-----------------|-----------------------|----------------------------------|
| 21-C | MINE | IOC | CERCLA Database |
| 22-C | MILLSITE | IOC | CERCLA Database |
| 23-C | WOOD TREATMENT | VOC | CERCLA Database |
| 24-C | INDUSTRIAL SITE | VOC | CERCLA Database |
| 25-C | LANDFILL | Microbial, SOC, VOC, | CERCLA Database |
| 26-C | RAILROAD DUMP | SOC,VOC | CERCLA Database |
| 1-T | INDISTRIAL | SOC,VOC | Toxic Release Inventory Database |
| 2-T | INDISTRIAL | SOC,VOC | Toxic Release Inventory Database |

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Section 3. Susceptibility Analyses

Significant potential sources of contamination were ranked as high, moderate, or low risk according to the following considerations: hydrologic characteristics, physical integrity and construction of the intake, land use characteristic, and potentially significant contaminant sources. The susceptibility rankings are specific to a particular potential contaminant or category of contaminants. Therefore, a high susceptibility rating relative to one potential contaminant does not mean that the water system is at the same risk for all other potential contaminants. The relative ranking that is derived for each intake is a qualitative, screening-level step that, in many cases, uses generalized assumptions and best professional judgement. The following summaries describe the rationale for the susceptibility ranking.

Intake Construction

The construction of the Harbor View Estates Homeowners Association, Inc. water system intake directly affects the raw water quality coming into the filtration plant. The Harbor View Estates Homeowners Association, Inc. intake draws water from Coeur d'Alene Lake at a depth of 120 feet about 300 feet from the shore at Three-Mile Point. It is located more than a mile from the nearest stream. In a susceptibility Analysis calculated September 21, 2000 by DEQ staff, the intake construction score was 2, moderately susceptible, because the intake is without an infiltration gallery. An infiltration gallery consists of horizontal screens laid in an excavated trench that is backfilled with alluvial material. The infiltration gallery filters out large debris and reduces turbidity before treatment.

Potential Contaminant Source and Land Use

The intake also ranked in the moderately susceptible category for contamination by IOC, SOC, VOCs and microbial pollutants. None of the contaminant sources inventoried are within 1000 feet of the intake. Table 2 summarizes the Susceptibility Analysis categorizations for the Harbor View Estates Homeowners Association, Inc. intake.

Table 2. Summary of Harbor View Estates Homeowners Association, Inc Susceptibility Evaluation

| Intake | Contaminant Inventory | | | | System Construction | Final Susceptibility Ranking | | | |
|----------|-----------------------|-----|-----|------------|---------------------|------------------------------|-----|-----|------------|
| | IOC | VOC | SOC | Microbials | | IOC | VOC | SOC | Microbials |
| CdA Lake | M | M | M | M | M | M | M | M | M |

H = High Susceptibility, M = Moderate Susceptibility, Low Susceptibility

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

H* - Indicates source automatically scored as high susceptibility due to presence of either a VOC, SOC or an IOC above the Maximum Contaminant Level in the finished drinking water or the presence of a significant contaminant source within 1000 feet of the intake.

Susceptibility Summary

The Harbor View Estates Homeowners Association, Inc drinking water system is most threatened by contaminants from communities, agriculture, mining and other industries in the Coeur d'Alene-St Joe Basin entering the lake during periods of high runoff. Another concern is nutrient loading from septic systems serving the houses that line the shore.

Section 4. Options for Source Water Protection

The susceptibility assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what the susceptibility ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require education and surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

An effective source water protection program is tailored to the particular local source water protection area. A community with a fully developed source water protection program will incorporate many strategies. Because the watershed feeding Coeur d'Alene Lake encompasses such a large area, Harbor View Estates Homeowners Association, Inc should participate in programs that address management of the entire basin. Partnerships with federal, state and local agencies, industry and private groups should be established and are critical to success. Due to the relatively short time involved with the movement of surface water, source water protection activities should be aimed at short-term management strategies with an emphasis on dealing with long-term future impacts from these same sources.

Assistance

Public water suppliers and others may call the following IDEQ offices with questions about this assessment and to request assistance with developing and implementing a local protection plan. In addition, draft protection plans may be submitted to the IDEQ office for preliminary review and comments.

Coeur d'Alene Regional IDEQ Office (208) 769-1422

State IDEQ Office (208) 373-0502

Website: <http://www.deq.state.id.u>

References Cited

Idaho Department of Agriculture, 1998. Unpublished Data.

Idaho Division of Environmental Quality, 1994. Ground Water and Soils Reconnaissance of the Lower Payette Area, Payette County, Idaho. Ground Water Quality Technical Report No. 5. Idaho Division of Environmental Quality. December 1994.

EPA (U.S. Environmental Protection Agency), 1997, State Methods for Delineating Source Water Protection Areas for Surface Water Supplied Sources of Drinking Water, EPA 816-R-97-008, 40p.

U.S. Government Printing Office, 1995, Code of Federal Regulations, 40 CFR 112, Appendix C-III, Calculation of the Planning Distance

Idaho Department of Environmental Quality, 1999, *Protecting Drinking Water Sources in Idaho*.

Attachment A

Harbor View Estates Homeowners Association, Inc. **Susceptibility Analysis** **Worksheet**

The final scores for the susceptibility analysis were determined from the addition of the Potential Contaminant Source/Land Use Score and Source Construction Score.

Final Susceptibility Scoring:

0 - 7 Low Susceptibility

8 - 15 Moderate Susceptibility

> 16 High Susceptibility

Surface Water Susceptibility**Report**Public Water System Name **HARBOR VIEW ESTATES HOMEOWNERS ASSN INC**

:

Public Water System **1280222**

Number :

11/13/00 9:03:57 AM

Source:

CD'A LAKE**1. System Construction****SCORE**

Intake structure properly constructed

YES

0

Infiltration gallery

NO

2

Total System Construction Score**2****2. Potential Contaminant Source / Land Use****IOC****VOC****SOC****Microbial****Score****Score****Score****Score**

Predominant land use type (land use or cover)

BASALT FLOW, UNDEVELOPED,
OTHER

0

0

0

0

Farm chemical use high

NO

0

0

0

Significant contaminant sources within buffer zone and 1000 feet of intake *

NO

Sources of class II or III contaminants or microbials

In the 500' buffer zone and more than a mile from intake

(Score = # Sources X 2) 8 Points Maximum

8

8

8

8

Agricultural lands within 500 feet of intake

NO

0

0

0

0

Three or more contaminant sources elsewhere in watershed

YES

1

1

1

1

Sources of turbidity in the watershed

YES

1

1

1

1

Total Potential Contaminant Source / Land Use Score**10****10****10****10****3. Final Susceptibility Source Score****12****12****12****12****4. Final Source Ranking**

Moderate

Moderate

Moderate

Moderate

POTENTIAL CONTAMINANT INVENTORY

LIST OF ACRONYMS AND DEFINITIONS

AST (Aboveground Storage Tanks) – Sites with aboveground storage tanks.

Business Mailing List – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

CERCLIS – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as **Superfund** is designed to clean up hazardous waste sites that are on the national priority list (NPL).

Cyanide Site – DEQ permitted and known historical sites/facilities using cyanide.

Dairy – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

Deep Injection Well – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100-year floodplains.

Group 1 Sites – These are sites that show elevated levels of contaminants and are not within the priority one areas.

Inorganic Priority Area – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

Landfill – Areas of open and closed municipal and non-municipal landfills.

LUST (Leaking Underground Storage Tank) – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

Mines and Quarries – Mines and quarries permitted through the Idaho Department of Lands.)

Nitrate Priority Area – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System) – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

UST (Underground Storage Tank) – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

Wastewater Land Applications Sites – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

Wellheads – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.